

VOLUME 32 : ISSUE 5

OCT NOV 2015

# QL QUANTA

THE DEFINITIVE QL MAGAZINE



**EDITORIAL**

**NEWS**

**MORE TSP**

**LETTER**

**SIDE**

**NEMLUG WORKSHOP**

**SPRITE DESIGNER**

**COPYDATE**



# QUANTA

## INFORMATION ON THE ASSOCIATION

Membership of QUANTA, the independent QL user group, is by annual subscription. The Membership Secretary can supply full details. Copies of the association's constitution & annual accounts are available from the Secretary.

### QUANTA Committee - 2015/2016

Chairman: Sarah D. Gilpin 181, Urmston Lane, Stretford, Manchester. M32 9EH  
Email: [chairman@quanta.org.uk](mailto:chairman@quanta.org.uk) Tel: 0161 865 2872

Secretary: Alison Southern 40, Distaff Road, Poynton, Cheshire. SK12 1HN  
Email: [secretary@quanta.org.uk](mailto:secretary@quanta.org.uk) Tel: 01625 850067

Treasurer & Membership Secretary: John Gilpin 181, Urmston Lane, Stretford, Manchester. M32 9EH  
Email: [treasurer@quanta.org.uk](mailto:treasurer@quanta.org.uk)  
Email: [membership@quanta.org.uk](mailto:membership@quanta.org.uk) Tel: 0161 865 2872

Magazine Editor: Lee Privett. 25 Mucking Hall Road, Barling Magna, Southend on Sea, Essex. SS3 0NH.  
Email: [editor@quanta.org.uk](mailto:editor@quanta.org.uk) Mobile: 07985 513 234

Librarian: David Buckley 136, Denton Lane, Chadderton, Oldham. OL9 8PS  
Email: [librarian@quanta.org.uk](mailto:librarian@quanta.org.uk) Tel: 0161 622 1600

Helpline & News Editor: Dilwyn Jones 22 Erw Las, Coetmor New Road, Bethesda, Gwynedd. LL57 3NN  
Email: [helpline@quanta.org.uk](mailto:helpline@quanta.org.uk)  
Email: [news@quanta.org.uk](mailto:news@quanta.org.uk) Tel: 01248 601599

Web Administrator & Web Master: Keith Dunbar 44, Dalton Avenue, Stretford, Manchester. M32 9TP  
Email: [webadmin@quanta.org.uk](mailto:webadmin@quanta.org.uk) Mobile: 07789 483 800

I.C.M.: Dave Park, 1406 Dana Court, Round Rock, TX USA 78664  
Email: [dave@quanta.org.uk](mailto:dave@quanta.org.uk) Tel: (512) 529 7863

Back Issues Requests: Email: [backissues@quanta.org.uk](mailto:backissues@quanta.org.uk)

*QUANTA reserves the right to publish, reject or edit any material submitted. The opinions expressed are solely those of the contributors. Member's private small ads - free (up to 50 words). Non-members private small ads (and members after 50 words) 50p per 10 words or part thereof. Terms strictly paid up-front with order. Receipt if requested. All copyrights and trademarks are hereby acknowledged.*

# CONTENTS

EDITORIAL .....	LEE PRIVETT .....	4
QUANTA NEWS .....	DILWYN JONES .....	6
QUO VADIS DESIGN .....	ADVERTISEMENT .....	10
MORE TSP .....	STEVE POOLE .....	12
JOCHEN MERZ SOFTWARE.....	ADVERTISEMENT .....	16
LETTER.....	PER WITTE.....	21
SIDE .....	GEORGE GWILT.....	22
SMALL ADS.....	ADVERTISEMENT .....	24
CHAIRMAN'S NOTES.....	SARAH GILPIN .....	32
HELPLINE.....	DILWYN JONES.....	33
RWAP SOFTWARE .....	ADVERTISEMENT .....	34
WORKSHOP REPORT .....	LEE PRIVETT .....	38
RWAP MEMBRANES .....	ADVERTISEMENT .....	44
SPRITE DESIGNER PT.1 .....	LEE PRIVETT .....	42
SUBGROUPS .....	INFORMATION.....	47
COPY DATE .....	(FOR NEXT ISSUE) .....	51
QL FORUM .....	ADVERTISEMENT .....	52

*Visit our website at :*

[www.QUANTA.org.uk](http://www.QUANTA.org.uk)

*'Like' us on Facebook at :*

[www.Facebook.com/QUANTA.org](http://www.Facebook.com/QUANTA.org)

**W**ell the last issue's Editorial caused a slight stir the QL world regarding the display in Ford KA. A few people mentioned that the display resolution (albeit the font resolution) was not the same as the QL, in fact the font displayed had a few less pixels per character than the standard BBQL has.

This is in fact correct, although I did just refer to the width dimensions and I did say it 'looked like' the QL font. However after the comments came in, I considered this difference for a moment and realised that it makes the QL appear even better (display wise) compared to the technology used in some cars 30 years later.

This again reminded me of my time working as an engineer in the Ford Motor Company in the 1980's where my colleagues and I experienced the development of the Sinclair MK14, ZX 80, ZX81, ZX Spectrum and QL all in the space of a few years. I was fortunate enough to work with like minded electronics enthusiasts and more or less on a daily basis, one of us would bring in at least one of these devices to "play" with.

Debates about the best processor ensued around the ZX81 (the Z80) and the 8085 and possibly its successor of which the name escapes me for the moment (8086?). In the work world of Fords to cut down on wiring harness/loom in cars (as copper prices were on the substantial increase) and for other reasons, some of the cars produced at Dagenham started having processor based electronic boxes fitted.

This caused us in the Electronics Lab great excitement , so we obtained one to look at. It was a sealed unit at the time, however

this was overcome with a few chemicals and in the box (roughly the size of tobacco tin) was a printed circuit board with inputs and outputs. Additionally there was one massive wire (don't know what that did) and at the heart of it was either an 8085 or 8086 (if my memory serves me correctly). Wow a computer (powerful for the time) in a car (I suppose you had to be there). As we were all Z80 fans due to Sinclair 's ZX range, we quickly lost interest in exploring that any further but seeds were set to monitor its development, however it was interesting that even then, computer based systems were making in-roads in to the auto industry.

At the time I think the initial ideas around CPUs in cars were to have three computer systems. One in the boot (trunk), one under the dash and one under the bonnet (hood) that were interconnected by a four wire system. Two for power (not relying on the body for return) and two for data send and receive. All lights, switches and sensors would be connected locally to the nearest computer system and centrally controlled.

These were exciting times for me and my colleagues and I feel set the trend of my then future interests both hobby and career. When now considering today's developments in electronics or computing they fail (for me) to enthuse or get excited about. Movement and technology in this area is at a point of me wanting the world to stop for awhile, while I concentrate time in exploring what they are and what I can get them to do (*Has anyone else had similar experiences?*).

For those of you who watch television, you might want to check out the current series of Dave Gorman's "Life is Goodish" on the DAVE channel, Tuesdays at 10pm. Let me know if you know what I am on about (you don't have to watch all of it).

*The Editor*

If you have QL-related news items that you'd like us to include on this page, please get in touch with News Editor - Dilwyn Jones at [news@quanta.org.uk](mailto:news@quanta.org.uk)

## **SMSQzine Issue 2**

*Timothy Swenson writes:*

The second issue of SMSQzine is now available from my Google Sites page:

<https://sites.google.com/site/svenqhj/home>

Just look at the bottom with the files and you will find it, along with a zip file which contains all of the source code mentioned on the zine.

This issue includes articles entitled 2<sup>nd</sup> Annual Midwest Timex/Sinclair Computerfest, QPC1 and DosBox, Astronomical Algorithms on the QL, Computer Graphics with Pascal, QL Benchmarks and a brief Editorial, unusually, at the back of the issue. The zine can be downloaded as a PDF file or a zip file from the site above.

## **Photon/FJPEG Updated**

Dave Westbury has issued an update to his JPEG viewer software for the QL. Pending a later full release of Photon, he has issued an update of his FJPEG software, which now converts JPEGs to QL PIC file format in modes 16 (Aurora and QPC2 256 colour), 32

(QPC2, QXL and SMSQmulator) and 33 (Q40 and Q60). The program can also output two extra modes, mode 64 (24 bit RGB mode – no QL system yet supports that, but may be useful for anyone writing software to further process images without viewing) and a brand new mode 65 to output 24 bit YcbCr, useful for monochrome/sepia rendering (YCbCr is the native JPEG output - RGB has to be calculated from it using signed MUL's).

The present version does not convert to QL modes 4 and 8, because too much dithering would be needed, the author says it MAY be implemented in a future release of Photon.

FJPEG can be LRESPRed as a SuperBASIC extension function. This function only supports JPEG file types known as DCT Baseline (also known as Sequential, most common type). It is expected that progressive JPEGs will be supported in a future release of Photon. Here's an example command – full details in the text file which accompanies the program:

```
error%=FJPEG(inputfile$,outputfile$,dmode%[,addr])
```

Additional facilities include adding 256 to the mode number to skip every third line (4:3 to 2:1 scaling), adding 512 to output in sepia tones, and adding 512+1024 to output in black and white. The optional parameter 'addr' allows you to specify your own colour lookup table for use when converting to 256 colour mode.

Download the latest version of FJPEG and Photon (long with a BASIC program called JPEGdetail to look at the details of a JPEG file) from:

<http://www.dilwyn.me.uk/graphics/index.html>

Dave Westbury is on QL Forum if anyone wishes to provide feedback or ideas for additional facilities.

## **QUBIDE**

Demand for the Qubide boards has enabled Jose Leandro to order components for another batch of Qubide boards, but almost as soon as he announced them, they were all snapped up by the middle of September.

Nice to see that demand for QL mass storage is still leading to good levels of sales for these devices.

It's a similar story with QL-SD. The SD card interface is sold via SellMyRetro.com at:

<http://www.sellmyretro.com/offer/details/QL-SD-internal-SDHC-Card-Interface-for-QL-%28switchable%29-3703>

This page shows that (at the time of writing) 46 units have been sold with none available. AT one stage Paul (who builds the QL-SD) asked people on QL Forum if he should increase production to keep up or raise prices, presumably to control demand.

Irrespective of price increases, let us hope that more of these devices can be made to satisfy the demand.

## **Signal Extension update**

There is a small update to the Signal Extension (originally written by Richard Zidlicky, author of the uQLx emulator) on the Toolkits page of my website. This update enables the Channels menu of QPAC2 recognises device names.

<http://www.dilwyn.me.uk/tk/index.html>



## **PCB Design update**

Malcolm Lear has issued further updates to his PCB Design program, which now stands at version 7.37. Here is the list of changes in this version:

- ◇ File read/write/delete access checking improved considerably with less reliance on DEVICE\_STATUS.
- ◇ Layer check on new text, track and pad now copes with layer zero.
- ◇ Gerber export filename layer number has leading zero added.
- ◇ Fiducial marker has been reduced in size to 3mm diameter as required by most modern assembling manufacturers.
- ◇ When Turbo compiled, PCBDesign is now platform independent. Any SMSQ/E specific procedures and functions are automatically replaced with dummies if not resident at boot thus will run on a QDOS platform without modification albeit with somewhat reduced functionality. QL compatibility was determined by testing with QL2K.
- ◇ Pick and place coordinates and component orientation mirrored for reverse side.

## **Quantum Technology is back**

Giorgio Garabello has announced that his Italian QL website is almost back (September) – Giorgio used to have a site with a large amount of QL software for Italian QL users to download. When ready, the site will appear at <http://www.quantum.altervista.org/> - a temporary placeholder page is there at the moment.

QUO VADIS  
DESIGN

Independent Information  
Technology Services

www.ql-qvd.com

QL/QDOS/SMSQ/E Software

QUO VADIS DESIGN Independent Information Technology Services

QL/QDOS/SMSQ/E Software

Home Products Support Company Contact

Welcome

Quo Vadis Design sells software for the Sinclair Quantum Leap computer (QL) and variants including a new OS called SMSQ/E.

The QL is a computer in its 25th year Anniversary.

News

- QVD QL News Blog - keep up to date  
[News Blog](#)  
24/04/2009
- Quo Vadis Design Website Launched  
21/02/2009

FEATURED PRODUCT



BUY NOW!

Software emulations of the QL now available which run on a PC/Mac with Windows/ Linux or Mac Operating systems.

Copyright ©2009 Quo Vadis Design. All Rights Reserved

Home | Products | Support | Company | Contact

Bruce@ql-qvd.com

Quo Vadis Design  
38 Derham Gardens  
Upminster  
RM14 3HA  
UK

Tel: +44 (0)20 71930539  
Fax: +44 (0)870 0568755

**QPC2 IS NOW FREE AND  
AVAILABLE FROM MARCEL  
KILGUS WEBSITE**

<http://www.kilgus.net/qpc/index.html>

**Congratulations to Marcel  
on becoming a Father**

**Check the QL News Blog on  
our website for updates.  
[www.ql-qvd.com/blog](http://www.ql-qvd.com/blog)**

# SuperBASIC Syntax File For Notepad++

Some QL users prefer to edit SuperBASIC programs in a text editor, but the constraints of lack of syntax checking in an editor can make this a hit-and-miss job.

Daniele Terdina is now using the free Notepad++ editor for Windows systems, and has devised a syntax rules file for editing SuperBASIC programs.

This allows you to edit SuperBASIC programs in this editor with the various keywords and structures highlighted in different colours.



*Screen Shot of Notepad++ with SuperBASIC coding*

After downloading and unzipping, use the Language menu in Notepad++ to select 'Define your language...' then click on the 'Import' button to load the definition file. Load a SuperBASIC program and select the 'SuperBASIC' language from the bottom of the Language menu.

Similar syntax files already exist for editing SuperBASIC programs in BBEdit/Textwrangler, Vim editor, Textpad and MicroEmacs for QL. Download from <http://www.dilwyn.me.uk/basic/index.html>

*(I found when installing, that the SuperBASIC file has to be renamed with the extension .XML for my version of Notepad++ to recognise it. Ed.)*

## MORE TSP

STEVE POOLE

---

In 1984, when I bought my QL, I started by doing the coding exercises in the Beginner's Guide. The sluggishness of bubble sorting appalled me, and after some experimentation, I devised a 'Tally sort', and then forgot about it. Many years later it got published in QL magazines.

The idea was to use an empty integer array, and add a '1' in each cell whose index corresponded to the value of each number to be sorted. Obviously the biggest number you can sort by this method is 32766, the maximum index of a SuperBASIC array.

Once all the numbers had been thus tallied, to sort them all you have to do is look at every cell from 0 to 32766, and if the cell content is not zero, then you have the next number for the sorted list, the tally value in the cell giving the number of duplicates.

The method is ridiculously fast, if sometimes memory hungry, which is probably why it was never used on early computers with just a few Kb of RAM. The main disadvantage was that only raw data is sorted, useful for statistics, but not much use if you need to access the numbers again.

A few years back, Dilwyn asked me if it was possible to adapt tally sorting to text. QUANTA published the resulting program for characters, but being memory hungry, only words of up to four letters could be sorted, even on a 128 Mb QPC2 system.

The program required a supercomputer system for dictionaries, and I had no access to such technology. But again, the sorting was exceptionally fast.

This summer, working on the 'Shrink' Travelling Salesman Program, (TSP), it transpired that we needed a fast integer routine for sorting distances between cities, where we had to retain x and y coordinates. That meant not sorting raw data, but an array of node numbers, with cells containing calculated distances between cities and pointers to those nodes in a sorted list. For this I wrote Tally\_qta which achieves this in three stages ;

1. It uses a tally array of node distances
2. it then uses a square array to hold pointers to those cells
3. it then provides a list of node rank, pointer and distance values.

Now, with rank order we have a sorted list of accessible data, with pointers which can access say x & y values too, not just raw data. To use the routines, just load in your own data in place of the demo random numbers, and adjust the DIM values beforehand.

Again it is much faster than Quicksort, but has certain limitations. It can sort numbers in the range 2 to 32766, but with values limited to 4500, because SuperBASIC can't handle larger square arrays.

So we had our sort routine, where we could sort 32766 cities up to 4500 units (miles) apart, but had to abandon it, because in real life

cities are floating point distances apart, even though most internet test data uses integer distances. We must cater for all cases... and my QL Forum colleague (EmmBee) wants the TSP to be fully adaptable, before the release version is submitted for publication.

But at long last we have a fast integer sorting routine which will have many applications in specific domains. It is many times faster than Quicksort, and memory now being relatively cheap, could be worthwhile considering. The first listing is the 'original' tally sort demo, and the second is the latest mouse based pointer version for QUANTA, hence the name.

The REMark'ed out LINE number contains maximum values, where 'prynt' is zero so as not to upset timings. If you do not have 128Mb QPC2, you will have to experiment your own maximum values. But Tally\_bas will work on a 128Kb QL.

```
100 ::
110 REMark Tally_qta v10sept15
120 CLEAR: REMark qpc2 set at 128Mo.
130 REMark INKs: black=pointer: green=distance:
white=rank
140 REMark Tx=tallied_list: Ty=pointered_list:
Tz=ordered_list
150 WINDOW 512,206,0,0: CLS: RANDOMISE DATE
160 REMark numbers=32766: max_val=4500: prnt=0:
counter=0
165 numbers=32: max_val=45: prynt=1: counter=0
170 DIM Tx(max_val,1),Ty(max_val,max_val),Tz
```

```

(numbers,2)
180 start=DATE
190 IF start=DATE: GO TO 190: ELSE start=DATE
200 FOR pointer=1 TO numbers
210     value=RND(1 TO max_val)
220     Tx(value,1)=Tx(value,1)+1: tally=Tx
(value,1)
230     Ty(value,tally)=pointer
240     IF prynt: INK 0: PRINT !pointer;': '!
250     IF prynt: INK 4: PRINT ;value!!!
260 END FOR pointer: db=0: mt=0
270 IF prynt: PRINT \
280 :
290 FOR value=1 TO max_val
300     tally=Tx(value,1)
310     IF tally THEN
320     IF tally>mt: mt=tally
330     FOR kount=1 TO tally
340         IF kount>1: db=db+1
350         pointer=Ty(value,kount):
counter=counter+1
360         Tz(counter,1)=pointer: Tz(counter,2)
=value
370         IF prynt: INK 4: PRINT !value;': '!
380         IF prynt: INK 0: PRINT ;pointer!!!
390     END FOR kount

```

**JOCHEN MERZ SOFTWARE**

Kaiser-Wilhelm-Str. 302  
47169 Duisburg, Germany

Fax +49 203 502012  
EMail: SMSQ@J-M-S.com

**SMSQ.J-M-S.COM**

Thanks to Marcel, QPC2 is now freely available.  
You can download it from Marcells homepage

**www.Kilgus.net**

If you wish to print from QPC2, then you need

**QPCPrint**

... which is available from J-M-S.

Only 39.90 if you choose EMail delivery.

For additional 4 EUR, delivery will be on CD.

QPCPrint will allow you to print to (more or less) every printer which is installed under Windows (dot matrix, ink, laser, PDF "printer", FAX "printer" etc.)

You can place your order via letter or use the SSL order form on SMSQ.J-M-S.COM - click on "Online orders".

If you order by Mail or through the SSL contact form: We now accept VISA, MasterCard, Diners Club, JCB, Discover, UnionPay, BCard, DinaCard and American Express!

The order form has not been updated for the new card types at the time I write this ad, but it will be updated soon.

I am still working on changing the forms and implementing SEPA on all the order forms.



```

400      END IF
410 END FOR value: PRINT \\  

420 ::
430 FOR kount= 1 TO numbers
440  IF prynt: INK 7: PRINT !kount!
450  IF prynt: INK 0: PRINT !Tz(kount,1)!
460  IF prynt: INK 4: PRINT !Tz(kount,2)!!!
470 END FOR kount
480 PRINT \\DATE-start!'secs :!'numbers'  

numbers !': doubles!'db!': max_tally!'mt
490 ::

```

### *Pointer Version*

```

100 ::
110 REMark Tally_qta v10sept15
120 CLEAR: REMark qpc2 set at 128Mo.
130 REMark INKs: black=pointer: green=distance:  

white=rank
140 REMark Tx=tallied_list: Ty=pointered_list:  

Tz=ordered_list
150 WINDOW 512,206,0,0: CLS: RANDOMISE DATE
160 REMark numbers=32766: max_val=4500: prnt=0:  

counter=0
165 numbers=32: max_val=45: prynt=1: counter=0
170  DIM Tx(max_val,1),Ty(max_val,max_val),Tz  

(numbers,2)

```

```

180 start=DATE
190 IF start=DATE: GO TO 190: ELSE start=DATE
200 FOR pointer=1 TO numbers
210     value=RND(1 TO max_val)
220     Tx(value,1)=Tx(value,1)+1: tally=Tx
(value,1)
230     Ty(value,tally)=pointer
240     IF prynt: INK 0: PRINT !pointer;':!'
250     IF prynt: INK 4: PRINT ;value!!!
260 END FOR pointer: db=0: mt=0
270 IF prynt: PRINT \
280 :
290 FOR value=1 TO max_val
300     tally=Tx(value,1)
310     IF tally THEN
320     IF tally>mt: mt=tally
330     FOR kount=1 TO tally
340         IF kount>1: db=db+1
350         pointer=Ty(value,kount):
counter=counter+1
360         Tz(counter,1)=pointer: Tz(counter,2)
=value
370         IF prynt: INK 4: PRINT !value;':!'
380         IF prynt: INK 0: PRINT ;pointer!!!
390     END FOR kount
400     END IF

```

```

410 END FOR value: PRINT \\  

420 ::  

430 FOR kount= 1 TO numbers  

440 IF prynt: INK 7: PRINT !kount!  

450 IF prynt: INK 0: PRINT !Tz(kount,1)!  

460 IF prynt: INK 4: PRINT !Tz(kount,2)!!!  

470 END FOR kount  

480 PRINT \\  

DATE-start!'secs :!'numbers'  

numbers !': doubles'!db!': max_tally'!mt  

490 ::

```

## ***Update***

Since working in cooperation with a QL Forum programmer, great strides in optimisation have been made in the 'shrink' TSP.

The program as published in QUANTA calculated 100 cities in 11 seconds in SuperBASIC, or two seconds Turbo'ed on my PC. Now it calculates over 250 in just one second in SuperBASIC, but is being slowed slightly to get rid of one or two bugs which plagued us.

Speed has dropped from cubic to square polynomial, which is now very fast indeed. The program could run faster, but has to be conceived to allow large numbers of cities to be calculated, and in this sense it does very well indeed. Our aim is 32,000 nodes, about as big as would be possible using SuperBASIC arrays. We did try using the MATRIX\$ method, but this slows SuperBASIC results unfortunately.

George Gwilt kindly translated my original program into machine code, but the BASIC now being more efficient, that code will not be printed in QUANTA.

Improvements are still being made, especially in the realm of calculating distances and sorting them. To this end I rewrote the 'tally' and 'radix' sorting routines, which are now much more useful in general programs. Tally proves to be 10 times faster than quicksort for integers.

We are nearing the point where accelerating sorting will require either machine code or transcription to the 'C' language.

On test data we have, the program is now 100% accurate, and we are in the course of downloading more city test data from the internet. We have just tried using the program with VLSI circuit data, and got it 94% right on the first trial run.

The program contains code to check its own results and improve them, and this routine is itself in course of revision.

TSP code is also used in other domains such as ADN translations, but I have no example of how such code uses TSP. The program could be ready for publication in the science magazine, also named 'Quanta' within months.

We are now looking for any volunteers who could transcode the SuperBASIC program into a 'C' language. There is the possibility of a big prize if the code meets the conditions of the Clay Mathematical Institute, as the Travelling Salesman Problem was previously open yet unsolved.

At present only two programmers, myself included have worked on the program. A 'C' version would be compatible with other computer systems, and would allow the Clay Institute to make judgements. If anyone should be interested, please contact the Editor, or Steve Poole on the QL Forum software section.

## LETTER

## PER WITTE

---

**R**egarding the layout, its easy for those of us who only read it on our computer screens, to forget that the magazine also has to work as a black and white, A5-sized, paper copy.

Still, I think the listings are unnecessarily "lumpy". Even the early QUANTA magazines managed to serve 66 characters on single-spaced lines. As it is, it makes a dog's breakfast of carefully spaced remarks and the like. There has got to be a better way! Perhaps now, when it is easier than ever to publish in good quality, it might be worth considering whether an A4 format might be better suited, viz QL Today, RIP (not to mention Timothy Swenson's new e-zine!)

One needn't stretch to colour printing, if that is found to be more costly, but perhaps good quality grey-scale? At the very least, give the listings more space (normal font, 66 char/line, reduce spaces between lines).

*(OK, we will try some of this in this issue and see what the response is, if any member would like to further comment on this point or anything else please write to the Editor, page 2 for details. Ed.)*

**T**he other day, while shuffling papers on my desk in a vain attempt to find something, I came across a tattered page torn from an exercise book. On it were the words: "A little programming challenge!"

## OBJECTIVE

Write a routine which allows a program to pick itself when the pointer is held at the edges of the screen (similar to Windows Taskbar when set to "Auto Hide").

I think this request was given to me by someone during a workshop at the time of one of QUANTA's AGMs. I hope that whoever it was will read this to see a rather belated reaction.

### *A Solution Outlined*

There would be two programs, let's call them Side1 and Side2. Side1 would monitor the position of the pointer, setting up or removing Side2 as appropriate.

This requires two main actions, monitoring the pointer and manipulating Side2.

### *Monitoring the Pointer*

The Trap #3 call IOP\_RPTR can be used to find the position of the pointer. The routine is made to return with the position of the

pointer set in D1.L on conditions depending on the contents of D2.  
Useful conditions are:

Pointer sprite hit the screen's edge	[64]
Pointer moved from position in D1	[8]
Pointer out of window	[16]
Pointer in window	[32]

The use of the first of these is obvious.

The second condition would be used to test that no move had been made after hitting the edge for a requisite time. This mirrors what happens in Windows.

The third and fourth conditions, when both are set in D2, force the current position of the pointer to be set immediately in D1. In this way Side1 can test when to remove Side2.

*Which edge?*

When IOP\_RPTR returns on the sprite hitting an edge you have to find out which. For example you might think that if the left hand edge is hit, the x-position of the pointer will be zero. Alas, it is not the pointer which hits the edge, but the pointer's sprite.

Each sprite has an origin defining where the pointer is relative to the sprite. If the pointer is in the middle of the sprite, the position returned by IOP\_RPTR will be some pixels away from the screen's edge. In practice, it should be sufficient to assume that the pointer is within, say, 28 pixels from the edge. That is easy for the left and top edges. For the other two a knowledge of the screen size would be needed for a true determination.

# SMALL ADS

## TIRED?

*Tired of not seeing your name in print? Then spend an hour (MAX) in doing something to change that. We will put glitter on it! We will publish it. Comments, Programming, Reviews. Offers in excess of 50 words to the Editor*

## !!!Worried???

Don't worry about your spelling or grammar not being up to scratch, that is something we can correct or leave as necessary, the Editor's decision is final. Why not write a review, A review of a piece of hardware you have recently seen, obtained or bought that is related or used with the Sinclair QL. A review of a piece of Software you have bought or downloaded legally from a website that doesn't stick a virus on your system. Reviews of any other media such as books, magazines or even leaflets that other people may appreciate. Contact Mr Privett for details on how you can overcome your worry.

## WANTED

With FTC (Fleet Tactical Command) 1 having being found, I'm now trying to track down FTC II by Diren which is currently missing in action. I'm also after Top Team by Arunsoft which was a football management game. If you can help please contact Peter at:

[peetvanpeebles@yahoo.co.uk](mailto:peetvanpeebles@yahoo.co.uk)

## ### LOST ###

*The ability to do something positive, then submit something to the editor, you know it makes sense.*

## = URGENT =

*For the magazine are seeking a volunteer for the role of Treasurer. We are also seeking a volunteer for the role of Membership Secretary. Or we are seeking a volunteer for the role of Chairman of the magazine via the contact page inside the front cover. We will be glad to hear from you.*

## WINTER BLUES?

Then get writing and submit that SuperBASIC listing for the magazine. A Function or Procedure with very little documentation is welcome. A clever algorithm is just as welcome. **Short** Listings - any number of lines really, from just a few to a couple of pages, single or multiple procedures and functions. As long as you have written to either solve or explore a programming problem. Or even just for a bit of experimental fun. **Long** listings? No program is too big, no language too strange, whether its just concepts, SuperBASIC, block diagrams, Boolean logic, assembler, mnemonics (that's one for you George), C# C++ C- - or just plain C, Pascal, Fortran or even S\*BASIC, anything about everything would be appreciated. What if you don't know if your program listing is too long to be short or too short to be long? **NO WORRIES**, we accept medium listings too throughout the year so get writing **NOW!**

Contact us in the usual way, so contact us **NOW!**

If you would like to place a small ad then go to page 2 for full details of how to go about it, options are for QUANTA members as well as non-QUANTA members.



How does one find the screen size? In S\*BASIC this is given by SCR\_XLIM and SCR\_YLIM. In assembler you have to find the information yourself. This information is held in what is called the Con Linkage Block the address of which is held in sys\_clnk of system variables. sys\_clnk has the value \$C4. The x-size and y-size are held at positions \$F2 and \$F4 in the Linkage Block.

### *Manipulating Side2*

Side1 has two actions to take when dealing with Side2. It has to set Side2 running when the pointer rests on the chosen edge for long enough. It has to remove Side2 when the pointer is too far from the edge for long enough.

### *Starting Side2*

In S\*BASIC you can start a program with EX or EW. If you use EX you are immediately able to continue using S\*BASIC while the loaded program is operating. If you use EW you are locked out of S\*BASIC until the loaded program finishes. How can one perform these operations in assembler?

There are two main steps to be taken, creating the job using MT\_CJOB and then activating it using MT\_ACTIV. To do the first requires the lengths of code and dataspace to be set in D2 and D3. Information regarding these must be extracted from the program file header. Given this information MT\_CJOB sets an entry in the Job Table and allocates space for the job in the heap.

Before MT\_ACTIV is called, the program code must be loaded into the allocated space and the stack filled with channels and parameter list as required.

The program LEX5, listed below, can be used to do all this.

As you can see from the comments at the start it can perform either EX or EW with any required set of channels and parameter list. In addition, something that S\*BASIC does not do, it can set the contents of registers D0 up to A3.

The three routines whose names are given at the end form part of LEX5 but their source code is not listed here. The code can be found in the source code for GWASS. The routines can be accessed by a program using LEX5 by INcluding the file LEX5\_SYM\_LST which contains their addresses.

Once Side1 has been set going, Side1 must keep track of the pointer and remove Side2 accordingly. A description of this will be deferred until a later article.

```
; subroutine to EX or EW
;
; On entry:-
;
; A0 -> Prog name
; A1 -> The string for stack
; (length of string|no of channels|channels|length of
str|str)
; For no channels or pars A1 = 0
; A2 -> Reg string (A2=0 if no string)
; Reg string is 12 long words for D0, D1. . up to A3
; D2.B = Priority
```

```

; D1.L = Job owner (-1, or 0)
; D3.W = 0 for EX, -1 for EW
;
; On exit:-
;
; A0 -> Header of JOB
; A1 corrupted
; A2 corrupted
;
; D0 is error code (if D3.W = 0): return from called job
(if D3.W = -1)
; D1 is the called job's ID
; D2 is unchanged
; D3 is unchanged

```

```

; ERROR returns in D0 (TST'd)
;

```

```

MOVEM.L    D1-D4/D6/A4-5,-(A7) 28 bytes
MOVEQ     #0,D3                OPEN
MOVEA.L   A1,A4                -> chans/pars or
0
CMP.L     A1,D3                chans/pars? . .
BNE      L1                    . . yes
LEA      NULL,A4              set no chans/

```

pars

L1

	BSR	OPENFILE	possibly using
PROGD\$			
	BNE	EREX3	----->
	MOVEQ	#64,D2	size of space
for header			
	MOVEQ	#-1,D3	
	LEA	-64(A7),A7	keep space for
header			
	MOVEA.L	A7,A1	-> header space
	MOVEQ	#FS_HEADR,D0	get header . .
	TRAP	#3	
	TST.L	D0	
	BNE	EREX2	-----> . . oops
	MOVEA.L	A7,A1	reset pointer to
header			
	MOVEA.L	A0,A5	file ID to A5
	MOVE.B	5(A1),D0	type of file
	SUBQ.B	#1,D0	is it
executable? . .			
	BNE.S	EREX7	-----> . . no
	MOVE.L	(A1),D2	length of file
	MOVE.W	(A4)+,D6	length of chans/
pars string . .			
	ADDQ.W	#1,D6	
	BCLR	#0,D6	. . rounded up

	MOVE.W	D6,D3	Add this . .
	EXT.L	D3	
	ADD.L	6(A1),D3	. . to dataspace
	LEA	64(A7),A7	throw away
header space			
	MOVE.L	(A7)+,D1	retrieve owner
job			
	SUBA.L	A1,A1	no start address
	MOVEQ	#MT_CJOB,D0	create . .
	TRAP	#1	. . the job . .
	TST.L	D0	
	BNE.S	EREX8	-----> . . oops
	MOVEA.L	A0,A1	Job address in
A1 . .			
	EXG	A0,A5	. . and A5. A0 =
file ID			
	MOVE.L	D1,D4	keep new job ID
in D4			
	MOVEQ	#-1,D3	
	MOVEQ	#FS_LOAD,D0	load code . .
	TRAP	#3	
	TST.L	D0	
	BNE.S	EREX4	-----> . . oops
	MOVEQ	#IO_CLOSE,D0	close the . .
	TRAP	#2	. . file's
channels . .			

```

TST.L      D0
BNE        EREX6      ----->  . . oops
CMPA.W     #0,A2      Reg string? . .
BEQ        L4         . . no
MOVEQ      #11,D0
LEA        JB_D0-$68(A5),A0
L3         MOVE.L     (A2)+,(A0)+
          DBF        D0,L3
L4         MOVEA.L    JB_A7-$68(A5),A0  new job's stack
          ADDQ.L     #4,A0              set to the end
of data space
          LEA        (A4,D6.W),A4      set to the end
of the string
          LSR.W      #1,D6              no of words . .
          SUBQ.W     #1,D6              . . less 1
          BMI        EREX9      ----->  no string!
L2         MOVE.W    -(A4),-(A0)       put chans/pars
to stack
          DBF        D6,L2
          MOVE.L     A0,JB_A7-$68(A5)  store new value
of stack
          MOVE.L     D4,D1              retrieve new
job's ID
          MOVEM.L    (A7)+,D2-D4/D6/A4-5
          MOVEQ      #MT_ACTIV,D0      activate it
          TRAP       #1

```

```

TST.L      D0
EREX      RTS
;
EREX7     MOVEQ    #-1,D0
EREX2     LEA      64(A7),A7
EREX5     ADDQ.L   #4,A7
EREX4     LEA      24(A7),A7
           MOVE.L   D0,D4                keep ERROR code
           MOVEQ   #IO_CLOSE,D0
           TRAP    #2
           MOVE.L  D4,D0
           BRA.S   EREX1
;
EREX3     ADDQ.L   #4,A7
EREX6     LEA      24(A7),A7
EREX1     MOVEQ   #0,D1
           BRA.S   EREX
;
EREX8     MOVEA.L  A5,A0                replace ID
           BRA     EREX4
EREX9     MOVEQ   #-1,D0
           BRA     EREX6
NULL      DC.W    2,0,0                No chans or par
list

```

; The following routines were added by Dave Walker  
to GWASS

; (where the source code can be found)


; QSTRCPY Copy a QL string

; QSTRCAT Concatenate a QL string with another

; OPENFILE Open a file possibly using PROGD\$

## CHAIRMAN'S NOTES

SARAH GILPIN

ummer is over and we are approaching the time of year when we ask for volunteers to join the Committee. All nominations must be in to Alison Southern by 1<sup>st</sup> February 2016.

Nomination forms are enclosed in this magazine. Please remember that the nominee and the proposer must be current QUANTA members. All Committee meetings are held electronically using Skype, with those members living close to Manchester attending in person.

The last weekend of September saw the NEMQLUG workshop in Manchester. Although numbers were low, those that came settled down with their projects and ideas were bounced about the room. It was suggested at the end of the weekend that NEMQLUG might consider hosting more small workshops. This is currently being considered.



**M**embers wishing to submit helpline requests via email can use the email address [helpline@quanta.org.uk](mailto:helpline@quanta.org.uk) or if you prefer to use traditional post, please send the helpline request to me via the address printed inside the front cover of the magazine.

Obviously, we cannot guarantee to answer every query we receive, but we will do our best! Where we have been unable to answer the queries, we may print the help request as an open request in the magazine to ask if any of the readers can come up with a solution. And, of course, if readers feel that they have a better solution than we came up with, or would like to correct any errors we make, please write to us!

**Q**. What's the difference between an "App" and a "Program"?

**A**. A computer program is a set of instructions that can be executed by a computer. An application (or "app") is a piece of software which helps users perform a specific task. When you go back in the mists of computer time, the difference was a technical one – an "application" was a user program such as a word processor launched and dependent on an operating system to execute.

Strictly speaking, the term "app" is not the same as the original meaning of "application" even though people tend to use both synonymously.

More recently, the term "app" has drifted a little by the effects of

# RWAP Software

We have been working hard to safeguard the future of the Sinclair QL through creating an online QL Wiki backed by a repository of QL titles.

The QL Wiki enables people to see what software and hardware was produced for the Sinclair QL. The repository enables people to purchase working copies when their microdrive cartridges fail, or they move onto disks or emulators. Where we can, we obtain permission from the copyright holders to re-release items on the market.

This has enabled us to bring some of the titles back to the market as well as re-kindle interest in the Sinclair QL and its emulators.

Old favourites brought back to life include:

E.V.A., Vroom  
Black Knight, Double Block  
Jungle Eddi, The Lost Pharaoh  
Pangl, the Lonely Joker  
Microdeal's Flight Simulator, QL Hopper, The King,  
Night Nurse and Cuthbert in Space  
Mortville Manor, Darkside of the Moon [£10]

We still retain our existing catalogue, including:

Open Golf, Return to Eden,  
Stone Raider II, The Prawns,  
Hoverzone, Lost Kingdom of Zkul,  
Deathstriks, Nornarday,  
Flightdeck and QWord

All games are available on disk or for use with Q-emulator on the PC **from ONLY £5 each**

Microdrive versions also available - from £10 each.  
*Memory / system limits may apply - please check before ordering.*

Visit the QL Wiki for more details on software, books and hardware for the Sinclair QL:

[www.rwapadventures.com/ql\\_wiki](http://www.rwapadventures.com/ql_wiki)

**RWAP Software**  
3 Dale View Court, Fulford, Stoke-on-Trent  
Staffordshire ST11 9BA  
Tel: 01782 398143  
Email: [rich@rwapservices.co.uk](mailto:rich@rwapservices.co.uk)

Website:  
[www.rwapsoftware.co.uk](http://www.rwapsoftware.co.uk) or [www.sellmyretro.com](http://www.sellmyretro.com)



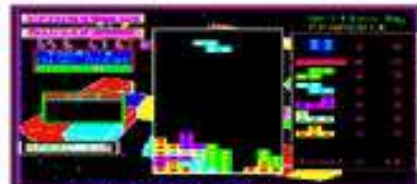
Vroom by Pyramide



E.V.A. by Westway



Mortville Manor by Pyramide



Double Block by Francois Lanleut



Night Nurse by Microdeal

marketing, to mean one of those little single-purpose bits of software to perform a specific task, e.g. a dictionary, a calculator, a quick weather display program, Facebook access and so on. In practice, the term “program” has become a little nerdy and the term “app” became sexier thanks to the marketing arms of computer companies who wanted to sell devices like phones and tablets to people who weren’t interested in the “computer” side of things.

In terms of the modern differences, think of an “app” as something which is started by an icon on a phone or tablet, while a “program” is a more traditional program running on a computer. Taking it to extremes, think of a program as something you needed to understand, while an app is something you just use without thinking about any underlying computing.

Please remember, though, that “app” and “application” are not strictly the same thing even though the marketing people tend to cloud over the differences. When trying to clarify the differences, think mainly in terms of what either does. An application can be a big complicated program such as a word processor or desktop publishing software, while an app might be a smaller single-function software. You can say that applications run on computers, while apps run on mobile devices, but even that distinction blurs when you realise that Mac computers tell us they run “apps” too.

So, to summarise, “apps” tend to be smaller programs with reduced or single specific functions largely aimed at mobile devices.

I would be happy to hear from readers who can give a clear and concise definition of both.

**Q**. QL hardware documentation is hard to come by, thinking of things like Microdrive timings, network protocols, TCP/IP and so on. Is there a single definitive source of such information?

**A**. Surprisingly, no. There are several out-of-print publications such as the QL Advanced User Guide (Adder Publishing), QL Technical Guide (Sinclair), QDOS Companion (Sunshine) and the QDOS Reference Manual (Jochen Merz)

The documentation part of my website includes a lot of documents with hardware information – QPTR manual, Socket API (for TCP/IP information), QL Service Manual and so on – have a look at this page:

<http://www.dilwyn.me.uk/docs/manuals/index.html>

and

<http://www.dilwyn.me.uk/docs/hardware/index.html>

Another good source of information, is source files for the operating system. QUANTA Library has commented sources for the JM and JS ROMs, on disks JM and JS. The Minerva source files are another great source of information at:

<http://www.dilwyn.me.uk/qlrom/m198src.zip>

The SMSQ/E sources are available from Wolfgang Lenerz at:

<http://www.wlenerz.com/smsqe/>

Emulator sources where available can also be a great source of information – Phill Harvey-Smith has put in a lot of work on the MESS emulator sources, have a look at [www.mess.org](http://www.mess.org) and <http://www.mamedev.org/release.html>

For ZX8302 information – see

<https://github.com/mamedev/mame/blob/master/src/mess/machine/zx8302.c>

and

<https://github.com/mamedev/mame/tree/master/src/mess/machine>

(sources for various parts of MESS emulation, not just QL).

QL network timing information can be found in Appendix B of the Toolkit 2 manual.

QL Forum is a great place for exchanging information of this nature, people like Tobias Fröschle do a great job helping out with requests for specific information, and with over 300 members including anyone from beginner to expert level.

There is sure to be someone who can help you find the information you need, and the owners of QL Forum recently improved the site search facility, making it easier to find specific things on there. Here's an example page showing just how well this exchange of information can work – it discusses Microdrive hardware and timings and tape data format:

<http://qlforum.co.uk/viewtopic.php?f=19&t=1269&p=10612&hilit=register#p10612>

**T**he NEMQLUG weekend workshop was held on Saturday 26<sup>th</sup> and Sunday 27<sup>th</sup> September 2015, was held at 3<sup>rd</sup> Davyhulme Scout Headquarters, Conway Road, Davyhulme, M41 0TZ.

Arriving around 10:00 we quickly had a horseshoe configuration of tables saving those neck muscles from constant twisting.

For the first hour most people were getting their equipment sorted and up and running before the crux of the workshop began.

Everyone had numerous issues (mainly software) for this workshop and it was the ability to quickly bounce ideas around to try and solve them while beavering away at their QLs, pseudo QLs, Raspberry Pi's and PC based emulators.



*Another piece of pie with David Buckley and Chris Grogan*

As can be seen on the front cover, our news and helpline editor had his 'usual issues' with devices running Windows Software, particularly Operating System. Those on the forum are probably well aware of this.



Keith Dunbar and Dilwyn Jones

Reported at the workshop were some very interesting items, the first was a walkthrough of installing uQLx on a Raspberry Pi and hence the continued interest in the Pi as a future use of all things QL. This walkthrough will hopefully be a future article in the magazine, so fingers crossed.

The second was uQLx running a SuperBASIC program which used the PTYC device on that emulator accessing a website and with some simple programming it could fetch from the web current weather conditions.

The demonstration by John Southern was quite amazing and we discussed the merits of not having to look outside and staying focussed on QL'ing.



*Yours truly with Alex Wells*

My own programming issue was with a set of routines that appeared not to work. It was only after discussing and demonstrating the routines with three other people at the workshop, that I was able to realise I had been trying to solve a problem that didn't exist. Not only that, I had been creating a false error that I had seemed to be chasing for days. This is one of the advantages of face to face communication and benefits of sharing such problems.



*Some of the group problem solving*



The previous picture showed David Buckley getting SMSQemulator working on his Raspberry Pi.

We were informed that of the now two Pi versions, Pi 1 can just about run SMSQemulator Java 7 version and Pi 2 can run SMSQemulator Java 8 version.

This hopefully caters for all people wanting to run a QL system (albeit SMSQ based) on modern hardware. A Propeller development hat for the Raspberry Pi also made an appearance.



*On the left, a Pi running a QL emulator and a Propeller development hat for the Pi*

Day two of the workshop also started around 10:00 am and a continuation of the previous days activities ensued. Dilwyn was exceedingly happy at the Welsh Rugby game and result the previous evening.

Unfortunately due to the previous commitments of a expectant first time grandfather I had to leave around midday, and the morning seemed to have whizzed by. Here's looking to more 2 day workshops in the future.

# SPRITE DESIGNER (PART 1) LEE PRIVETT

---

One of my many pet favs, is graphics and what you can do with them especially now (I mean in this day and age of technology) on a QL (a basic QL). Currently I am interested in what still works on a basic setup using an emulator. The QemuLator in fact, as at the moment this is what I tend to use for most of my QL programming.

So amongst other things I have been trying to get a well experienced programmer (no names mentioned) to help me create SPRITES on a QL based screen **greater** than 512x256 (obviously SMSQ based). Well that is not going well, so instead I am trying to see what will work currently on the small screen (link to FILM and TV terminology is deliberate).

On Dilwyn's mahoosive website, yes it is a word, here is the proof,



there is a section for sprites. Looking down the list you will see a ZIP file called Sprite.zip. It is for designing sprites and was written in its day by Herbert Zenz.

The web page url for the sprite.zip can be found here:

<http://www.dilwyn.me.uk/sprites/index.html>

I have downloaded this file and linked it to QemuLator directly, the ZIP file now becomes one of the 'drives' of the emulated QL.

Because you cannot write back to the ZIP file directly, I then created a folder on my PC and linked that folder to QemuLator as another working drive and then WCOPY all the files from the ZIP drive to the Working drive, job done. The next thing is to run the program.

Now I like things to be intuitive, and try not to read instructions unless I have to (anyone else?). Suffice to say it took quite a time to realise that this program is designed for a joystick device connected to one of the joystick ports on the original BBQL. It is not really designed for keyboard use. Secondly it has many quirky features and for the professional programmers out there you could say poorly written (although that would be an injustice).

However I am not here to criticize someone's programming skills in SuperBASIC, especially when they have already done the hardest part in the assembly of machine code to run a number of sprite routines. That is currently beyond my skills (any help please, anyone?).

What I want to do is understand the program and improve on it, this is what I intended to do within the constraints of the original program, and keeping some of its quirks. I think I have now achieved that, and the resultant program is being reproduced here for others to enjoy. Full credit still goes to Herbert Zenz for

his original program and keyword extensions, without which my contribution would not be possible.

As I went through the program, I found that in order to add to it I first had to understand it. Many of the procedures were written in Herbert's native language (German) and confusing to me so I have changed these to the nearest English equivalent. I have also added spaces between procedures with ":" lines and I started adding more options to the overall program as I understood it more. I also added REMarks to help that process.

# RWAP Software

## Replacement QL Keyboard Membranes

**Special Offer for Quanta Members**  
**£12 each plus post and packing**

**Quote "Quanta 2012 Offer"**


Post and packing:  
UK £2.50  
Europe £2.80  
Rest of World £3

Visit the QL Wiki for more details on software, books and hardware for the Sinclair QL:  
[www.rwapadventures.com/ql\\_wiki](http://www.rwapadventures.com/ql_wiki)

**RWAP Software**  
3 Dale View Court, Falford, Stoke-on-Trent  
Staffordshire ST11 9BA  
Tel: 01782 398143  
Email: [rich@rwapservices.co.uk](mailto:rich@rwapservices.co.uk)

UK Cheques payable to 'R. Mellor' or use PayPal.

Website:  
[www.rwapsoftware.co.uk](http://www.rwapsoftware.co.uk) or [www.sellmyretro.com](http://www.sellmyretro.com)



Why a bad keyboard membrane could change your whole career strategy!

Working to safeguard the QL for the future. [www.rwapsoftware.co.uk](http://www.rwapsoftware.co.uk)

Additionally I found that the program runs in both modes and this depends on which mode you are in as it is run. Different parameters are used depending on the mode, colour, pixels, resultant sprite etc. For these articles and simplicity I am only going to mainly refer to Mode 8, however both Modes are available in my modified version of the program.



*Screenshot of original program*

Above is how the original program looked when run, you have four main windows, the title window at the top, leftmost is the editor or editing window, middle is the sprite selection window and right most is the command window. The bottom line of the screen is the status bar (or that's what I call it anyway). You should be able to see in the status bar is the word EDITING, meaning you are in 'editing the sprite mode' (below the left most window with flashing \* character).

Below is how my modified program looks at start up and ignoring the sprites for a moment (as these were drawn by me as an exercise in using the program at each part of the testing process), I will describe the basic visual differences between the two.



*Screenshot of modified program*

Starting at the top left of the screen you will see a box with zero in it, this was initially put in so I could test what key is being pressed and note the numbers (this can be easily removed if it is not wanted).

Next, the Title window, I have text colour change and added my contribution also. Below the box with a zero in it is a smaller pixel sized version of the main editing window and as updated when changes occur to the main one. Next, the editing window remains the same, except for a slight visual change also applied to the two other main windows, and that was to reduce the size of the window

shadow to make it less intrusive. A small and some might say insignificant change but none the less and aesthetic one in my opinion.

Below the editing window is a new status box displaying the condition of the drawing cursor, PEN UP when moving and PEN DOWN when moving and drawing in the colour of the ink selected. This is currently black as indicated below that, black is basically the transparent colour in a sprite and not displayed on screens as such (although black can be a background colour on screen).

Below this is the status bar, which now includes more pertinent information. E.g. the bar shows cursor options, “ENTER, SPACE, TAB, CTRL, B, C, F, R”. These are all the key presses now available to the user and not the joystick control available to the original BBQL. B refers to BOX and draws a box in the current colour in the editing window. C refers to change colour and will change the current chosen colour for another in the editing window. F is a repeat of the Fill command available in the original program and R will place randomise colours in every place within the editing window.

Well that’s all for now, part two is in the next issue where we look at the rest of the visual changes , operational changes and listings.

## **SUBGROUP INFORMATION**

---

**S**ubgroup meetings are where QUANTA members and non-QUANTA members get together to discuss, tinker and explore all things QL related. As we are now approaching autumn (ha!) the holiday season may be over for most, now is the time to get the QL juices flowing again.



Go on you know it makes sense, I am convinced this is a major contribution to road safety, watch out there is a Humphrey about, why am I stuck in a 70's advertising loop?

This might be a good opportunity to visit your local sub-group. If there is not a sub-group near you why not hold one yourself? Contact the chairman on how to go about it, details on our contacts page, which as always is on page 2, just after the front cover page and just before the contents page. Sub groups could have meetings once or twice a year you know, you might be surprised who would turn up.

We would also like to hear from subgroups and how their meetings are going. What are the points of discussion, any titbits, interesting issues or problems that crop up. Additionally what is the colour of the wallpaper, quality of the Tea and Coffee and most importantly, what are the subgroups preferences on biscuits. Thus far no one has reported back on any of the information stated above, I therefore have to report that besides the Manchester workshop, subgroup meeting must be very quiet and mainly conducted in the dark (unless you know otherwise).

## **LONDON QL AND QUANTA GROUP**

**M**eetings are held in the School Room, which is the basement of the Borough Welsh Congregational Chapel, 90, Southwark Bridge Road, London SE1. This is almost opposite the junction with Marshalsea Road, at the other end of which, 5 minutes walk away, is the Borough Underground Station.

Free parking is easily available in Southwark Bridge Road for road users, Cyclists are welcome. Members currently each pay a subscription of £40 per year towards the cost of the hire of the hall and a small additional charge is made for tea/coffee - biscuits are



then provided free. Please bring your QL equipment if possible, all types welcome, e.g., PC portable running emulators.

The Group has some systems stored at the venue for its use. In addition, there are lots of donated second user equipment, books, magazines, etc., available for purchase. Time: 2.00 pm. to 5.00 pm., on the second Sunday of the month. No meetings are held in December/January - winter break, or July/August –the summer break, giving 8 meetings a year. Malcolm Cadman 020 8691 5780 or email: [QL@mcad.demon.co.uk](mailto:QL@mcad.demon.co.uk)

### **SOLENT SUBGROUP**

**M** meetings are at 'Sarisbury Green Parish Rooms' see ([http://sgpr.org.uk/?page\\_id=28](http://sgpr.org.uk/?page_id=28)) On the first Saturday each month from 1PM to 5PM. Contact Graham Evans 023 8040 3350 or email: [graham@grayfire.f9.co.uk](mailto:graham@grayfire.f9.co.uk)

### **NEMQLUG - NORTH EAST MANCHESTER QL USER GROUP**

**M** meetings are held on the last Thursday of the month (except August & December) from 7.00pm to 11.00pm. All are welcome to our meetings. The venue is usually at John Gilpin's home 181, Urmston Lane, Stretford, M/cr M32 9EH (near Junction 7 on M60 motorway) but currently at Alison Southern's home, 40, Distaff Road, Poynton, Cheshire, SK12 1HN.

Contact us before the meeting – phone numbers inside front cover.

During 2016 there will be additional Sunday workshop meetings at 181, Urmston Lane on the following dates:

February 7<sup>th</sup>; April 24<sup>th</sup>; June 26<sup>th</sup> and Oct 30<sup>th</sup>; from 1.00pm to 7.00pm.

## SCOTTISH QL USERS GROUP

**S**

QLUG meets at George Gwilt's home every second Sunday in the month. Please contact George Gwilt before coming, to get the location by email:

[Gdgqler@gmail.com](mailto:Gdgqler@gmail.com)

## SURREY QUANTA SUBGROUP (SQSG)

**T**

he group is currently trying other venues in the Leatherhead - Epsom area. If you plan to attend but do not get our emails, please contact Ken Bain for the latest location. Meetings are 8.00 to 10.00 pm on a

Wednesday, the last of each month (none in December), but this can vary. Contact Ken Bain 01932 347432 (to midnight), or email:

[kenb@bcs.org.uk](mailto:kenb@bcs.org.uk)

## SUSSEX QL USER GROUP

**C**

urrently without a meeting place, anyone interested should contact Roy Wood 01273 430501 or email:

[gbranch@gbranch.demon.co.uk](mailto:gbranch@gbranch.demon.co.uk) or Keith Mitchell - 01903 742263.



*Logo*

**COPY DATE for DEC/JAN 2015**  
**ISSUE is: 5th DEC 2015**

Please ensure that your copy reaches the editor on or before that date. Copy on Paper, Magnetic Media or by Email. Text & listings are preferred in ASCII format as text files, Microsoft™ Word Documents or in QL Quill formatted files. All graphic submissions in as high a resolution as possible, preferably in PNG format, other forms of submission can also be accepted, please contact the Editor for details.

All Contributions are Welcome  
Copy by Email to - [editor@quanta.org.uk](mailto:editor@quanta.org.uk)

*This magazine and all the articles etc. within it are copyright © QUANTA 2015 unless otherwise stated. Reproduction and redistribution in any form is not allowed without the express written permission of the publisher. All copyrights and trademarks are hereby acknowledged.*

# The online QL community

Now with QUANTA section!

New online chat facility!

Free to join!

No registration  
needed to view

Please stop by for a visit!



[www.qlforum.co.uk](http://www.qlforum.co.uk)